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#### Hirukawa et al.

# (54) FIXED TYPE CONSTANT VELOCITY UNIVERSAL JOINT

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### (57) ABSTRACT

In a fixed type constant velocity universal joint, track grooves of an outer joint member include first and second track groove portions positioned on interior and open sides, respectively. Each of the first track groove portions includes an arc-shaped ball raceway center line having a curvature center prevented from being offset in an axial direction of the outer joint member with respect to a joint center. Planes each including at least the ball raceway center line and the joint center are inclined with respect to a joint axial line with their inclination directions opposite to each other in the first track groove portions, which are adjacent to each other in a peripheral direction of the outer joint member. Each of the second track groove portions includes a ball raceway center line having a straight part when being projected onto corresponding one of the planes.

### 11 Claims, 19 Drawing Sheets



